

products; fruits and vegetables; and tobacco. Developing countries, dominated by Latin America, supply almost two-thirds of imports into the United States. Among developed countries, the European Community is the largest supplier.

The fall in exports and the rise in imports have brought a substantial decline in the U.S. agricultural trade surplus, from \$26.6 billion in the peak year of 1981 to only \$5.0 billion in 1986 (see Table 7). For several months in 1986, the United States actually imported more agricultural products than it exported.

TABLE 8. U.S. AGRICULTURAL EXPORTS BY REGION,
FISCAL YEARS 1981 AND 1986
(In billions of dollars)

Importing Region	1981	1986	Change from 1981 to 1986 (In percent)
Western Europe	11.8	6.8	-42
European Community	8.9	6.4	-28
Other	2.9	0.4	-86
Eastern Europe	2.0	0.4	-80
Soviet Union	1.7	1.1	-35
Asia	16.1	10.5	-35
Middle East	1.8	1.2	-33
South Asia	0.6	0.5	-17
Southeast and East Asia	4.8	3.5	-27
Japan	6.7	5.1	-24
China	2.2	0.1	-96
Canada	2.1	1.5	-29
North Africa	1.5	1.4	-7
Other Africa	1.3	0.7	-46
Latin America	6.9	3.6	-48
Oceania	0.2	0.2	0
Total	43.8	26.3	-40
Developed Countries	20.9	14.0	-33
Developing Countries	16.9	10.7	-37
Centrally Planned Countries	5.9	1.6	-73
Total	43.8	26.3	-40

SOURCES: U.S. Department of Agriculture and Congressional Budget Office.



NATIONAL FARM POLICIES AND INTERNATIONAL TRADE

One problem dominates international agricultural markets: present and prospective world supplies of most products far exceed the amounts demanded by consumers. Stockpiles here and abroad have expanded, and world prices have fallen dramatically. At the same time, the government expenditures required to maintain farm programs in many countries have soared. There is an increasing recognition that the current crisis in agricultural conditions results primarily from the national farm programs employed by governments throughout the world. Most such programs give farmers incentives to increase production even as world market conditions deteriorate. It has become evident that these production incentives must be reduced if the conditions of oversupply are to be reversed.

The fundamental problem for policymakers, therefore, is how to devise national farm programs that respond to changes in market conditions, especially in terms of supply incentives, while still recognizing the needs of politically important domestic farm sectors. The task is not just to relieve current imbalances in agricultural markets, but also to reduce the likelihood that they will recur in the future. The United States and, to a lesser extent, the European Community have recently moved in that direction, but their farm policies as well as those in most other countries are still not in line with world market conditions. The need for further change has been recognized. Key governments have agreed to negotiate on how to coordinate long-term reforms in their overall farm programs--not just in their agricultural trade policies--during the Uruguay Round.

This section focuses on how GATT rules will have to be changed to accommodate reform; how various national farm programs operate; and how these programs compare in their effects on producers.

GATT's Treatment of Agricultural Trade

Agricultural trade policy has long received special treatment in GATT. The GATT rules allow a wide range of nontariff barriers in agricultural trade, especially import quotas and export subsidies, that are not permitted for trade in manufactured products. Over the years GATT members, led by the United States, the European Community, and Japan, have refused to expose their farm programs to meaningful international negotiation.

Although not specifically mentioned in the original GATT documents, import quotas and export subsidies for agricultural products have come to be

permitted by GATT. The general prohibition on import quotas was explicitly breached in 1955 when the contracting parties agreed to a waiver (often called the Section 22 waiver) permitting U.S. import quotas that were needed to sustain domestic farm supports, as legislated in Section 22 of the Agricultural Adjustment Act of 1933. Other countries, such as the European Community and Japan, whose goals during the 1950s and 1960s were to increase self-sufficiency in food products, devised various restrictions on agricultural imports that were not covered explicitly by the GATT rules.

The use of export subsidies for agricultural products became increasingly important as Europe's farm production began to exceed demand in the 1970s. Rather than stockpiling its surplus, the EC through its Common Agriculture Policy developed a system of export subsidies to dispose of surpluses on world markets. An agreement on subsidies during the Tokyo Round legitimized export subsidies for agricultural products, with the qualification that the subsidized products not acquire "more than an equitable share of world trade." Tacitly, this agreement sanctioned market-sharing agreements for agricultural products. Recently, the United States has also resorted to explicit export subsidies.

GATT principles are further stretched in agricultural trade by the use of bilateral trade agreements and the extensive role in some countries of state trading monopolies. Significant agricultural trade reform would require that all agricultural trade policies be fully covered by GATT rules and procedures, making necessary several amendments to the General Agreement to remove all special treatment for agriculture.^{4/}

U.S. Farm Programs

The long-standing aim of U.S. farm policy has been to stabilize and support farm prices and incomes over time, especially when market conditions are weak. Programs are currently in place to support prices and incomes for producers of the major field crops--wheat, coarse grains, soybeans, cotton, and rice--as well as for sugar, milk, tobacco, wool, peanuts, and honey.^{5/}

4. The key parts of the General Agreement in which agriculture receives special treatment are: article 11, which prohibits import quotas; article 16, which prohibits export subsidies; and the Tokyo Round Code on Subsidies and Countervailing Duties, which is the basis for the "equitable share" criterion. The 1955 waiver to article 11 mentioned above is particularly important.
5. See Congressional Budget Office, *Crop Price-Support Programs: Policy Options for Contemporary Agriculture* (February 1984), and *Diversity in Crop Farming: Its Meaning for Income-Support Policy* (May 1985).



Price and income support programs vary, depending on whether the United States exports or imports a commodity. In general, the major field crops are competitive on world markets and do not require protection from foreign imports. Producers of these products rely heavily on strong demand in world markets. For these export crops, U.S. farm policy is designed mainly to protect farm incomes when world market conditions deteriorate. Support is provided primarily through direct government subsidy rather than by maintaining high consumer prices. For farmers who cannot produce at internationally competitive prices, such as many sugar and dairy producers, prices are kept high and defended by import quotas and government purchases. For these products, domestic consumers subsidize farmers through high prices, and the protective policies reduce the farmers' exposure to fluctuations in world markets.

During the 1980s, the combination of weak demand and generous support levels caused U.S. exports to decline, government stocks to increase, and federal budget expenditures on farm programs to reach record levels (see Table 9). The Food Security Act of 1985 revamped U.S. farm policy, primarily for the export crops, by lowering price support levels (and thus

TABLE 9. U.S AND EC OUTLAYS FOR PRICE AND INCOME SUPPORTS, 1977-1987 (In billions of dollars)

Year	United States	European Community (EC-10)
1977	3.8	8.0
1978	5.6	11.5
1979	3.6	14.9
1980	2.7	16.6
1981	4.0	12.9
1982	11.6	12.8
1983	18.8	14.7
1984	7.2	15.0
1985	17.6	15.7
1986 <u>a/</u>	25.7	21.8
1987 <u>a/</u>	24.6	26.2

SOURCES: U.S. Department of Agriculture; European Community.

a. Estimated.

world prices) substantially in an attempt to revive U.S. exports, while maintaining the generous income supports of previous policy. To offset the incentives to increase production that are inherent in the producer price and income support system, program participants were required to reduce the acreage planted in these crops. New export incentives were also introduced to stimulate demand for U.S. farm products. Current farm policy is examined in more detail below.

Policies for Export-oriented Program Crops. Major field crops comprise the bulk of U.S. agricultural exports. The policy generally allows consumers to pay world market prices, although the government stands ready to buy commodities from participating farmers at a support price (the nonrecourse loan rate), which has the effect of establishing a domestic market price floor.^{6/} The government uses the nonrecourse loan program to support prices for wheat, soybeans, and coarse grains. (Cotton and rice producers are also eligible for nonrecourse loans, but marketing loans for these crops offset the impact of nonrecourse loans on market prices.) Under many conditions, this program also creates a price floor in world markets.^{7/}

The government also supports the incomes of producers of these crops, except soybeans, through deficiency payments. Deficiency payments are direct government subsidies that provide farmers with the difference between a "target price" for a commodity and its market price (or nonrecourse loan rate, whichever is higher). For 1986 crops, the target price for wheat is about 80 percent and for corn about 60 percent higher than the support

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6. A participating farmer may receive a nonrecourse loan at a specific per-unit rate (the loan rate), using the crop as collateral. If market prices are high enough when the loan comes due in 9 to 10 months, the farmer will repay the loan with interest and sell the crop. If market prices are too low, the farmer will forfeit the crop to the USDA at no penalty. In this way, nonrecourse loans can set a floor for U.S. market prices. Crop forfeiture forces the government to accumulate stockpiles of commodities, which are normally withheld from the market until prices improve.
 7. Just as Saudi Arabia plays the role of swing producer in world oil markets, the United States is the residual supplier for many international agricultural markets. When prices on world markets for these commodities fall near the U.S. loan rate, other exporters can sell their output at prices just below the U.S. loan rate, leaving only the residual world demand for U.S. exports at the loan rate price. As a result, the loan rate effectively establishes a floor for world prices. Not only does this situation reduce U.S. exports and increase government stocks, but, by keeping world prices higher than otherwise, it exacerbates the problem by dissuading foreign producers and consumers from reducing supply and increasing demand.



price. Deficiency payments are based on historical acreage bases and yields, which can be adjusted by the Department of Agriculture as market conditions change. Typically, the deficiency payment system has provided incentives for many farmers to increase output levels, although current policy has recently reduced these incentives substantially.

Government support for major crops expands substantially when market conditions worsen, as has been the case recently, and contracts when markets boom, as was the case during the 1970s. This system of price and income floors accomplishes relatively well the goal of supporting farm incomes when market conditions deteriorate, but at the cost of encouraging greater output. Government production incentives are greatest when markets are weakest, thus worsening and prolonging weak markets and increasing government expenditures.

The government tries to offset overproduction in two ways: by imposing production controls as a condition for participation in these programs and by seeking to expand demand, particularly for exports. Unpaid crop diversion requirements for 1987 program crops have been expanded substantially: participants must divert 20 percent to 35 percent of their acreage planted in various program crops to other uses. Coarse grain producers also have the option of idling an additional 15 percent of their acreage base in exchange for direct government payments. In addition, all farmers with erosion-prone land can receive payments for long-term acreage diversion through the conservation reserve program.

The government promotes demand for these crops by keeping consumer prices relatively low and by measures to increase foreign sales such as export financing assistance, humanitarian relief to developing countries, and market development activities.^{8/} Recently, as part of the 1985 Food Security Act, additional export incentives have been provided: the Export Enhancement Program subsidizes foreign purchases of U.S. commodities, primarily wheat and flour, by compensating U.S. exporters who sell to foreign buyers at prices below the U.S. market price (effectively the loan

8. Some agricultural exports are financed directly by government credits and others by federal guarantees on commercial loans. Exports to developing countries under P.L. 480, the Food for Peace Program, include sales underwritten by concessional, long-term financing and by donations. About 8 percent of all U.S. agricultural exports in fiscal year 1986 were accounted for by P.L. 480 exports, and about one-fourth of all P.L. 480 exports were donated. The Targeted Export Assistance program funds foreign market development activities.

rate).^{9/} This program has been expanding rapidly, notably through the sale of at least 4 million metric tons of wheat to the Soviet Union at a subsidy of about 33 percent. Marketing loans, which allow producers to sell their output at market prices but to be compensated up to the loan rate by the government, are available for cotton and rice sales to both domestic and foreign purchasers. Both of these programs allow market prices to drop below the U.S. nonrecourse loan rates.

Policies for Import-Competitive Agricultural Commodities. Some products that compete with imports, most importantly milk and sugar, are supported at price levels above world market prices. This support makes it necessary to restrict imports of such products through quotas. In this case consumers, rather than the government, pay the bulk of the subsidy to producers through high domestic prices. For sugar, where domestic demand exceeds supply, only import quotas are used to defend the support price. No government expenditures can be made on the sugar support program by law. World sugar prices have been depressed by the U.S. import restrictions and by the export subsidies employed by other countries, especially the European Community. Recently the U.S. import quota has declined sharply, primarily because high domestic sugar prices have stimulated production by domestic suppliers of corn and noncaloric sweeteners.

Since U.S. milk production is greater than domestic demand, the price of milk is supported both by limiting imports of dairy products and by government purchases of excess supplies of dairy products. In an effort to reduce the costs of this program, the 1985 Food Security Act introduced a dairy diversion program, which compensates farmers for slaughtering their herds and then remaining out of the dairy business for at least five years. More than one million cows, nearly 10 percent of all dairy cows, have been slaughtered under this program.

European Community Farm Programs

The countries of the European Community have integrated their farm programs into a Common Agricultural Policy (CAP). The CAP is based on three

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9. The compensation is now in the form of generic commodity certificates that can be sold, exchanged for government-owned stocks, or exchanged for cash. This program has been targeted toward buyers where U.S. exporters compete with other exporters who engage in what the U.S. government deems to be unfair trade practices. The recent sale to the Soviet Union under this program makes this eligibility requirement somewhat less meaningful. The total subsidy value under this program cannot exceed \$1.5 billion during the fiscal year 1986-1988 period.



principles: common pricing, Community preference, and common financing. Common pricing attempts to set a single level of price support for each commodity throughout the EC. Community preference ensures that EC products have a competitive advantage over imported products. Common financing requires the EC to fund all CAP activities.^{10/}

The CAP relies mainly on price supports to sustain farmers' incomes; it makes only limited use of direct income payments and other forms of support. Consumers bear much of the burden through the high support prices, although some input subsidies are used to lessen the impact of high raw material prices on refiners of many agricultural products. The CAP maintains internal price support levels above world price levels. It subsidizes exports to dispose of community surpluses (through so-called restitution payments determined by the difference between domestic support prices and export prices). And it defends the high support prices by means of intervention purchases and variable import levies.^{11/} The CAP applies most importantly to grains, milk and milk products, beef, and sugar. The supply of sugar and milk is held down through production quotas and marketing limitations; producers of these commodities are taxed to help finance the disposal of surpluses.

The CAP has encouraged production of many commodities far in excess of domestic need: self-sufficiency ratios are 120 percent for wheat, 107 percent for coarse grains, and well over 100 percent for most milk products in 1985/1986.^{12/} The EC was a net importer of many of these

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10. Most funding for CAP is provided by a communitywide value-added tax and import levies. The CAP is responsible for all price supports in the EC, but member nations also employ various non-price support programs, including research and extension programs. See Commission of the European Communities, *Report by the Commission to the Council and Parliament on the Financing of the Community Budget*, February 28, 1987.
 11. Variable import levies are tariffs that change over time to assure that prices of imports are always at least as high as domestic prices. When domestic demand exceeds supply, foreign products are imported, but total demand for the product is kept down by the high domestic price. If domestic supply exceeds demand, variable levies act to essentially ban imports, and EC intervention purchases are used to sustain the support prices.
 12. Production increased for a number of reasons. Not only were internal support prices set far above world prices, but until recently these prices rose steadily, providing farmers with a guaranteed price horizon, and encouraging investment in farming. Also, significant research and development expenditures contributed to large increases in agricultural yields, especially for soft wheat, as did the consolidation of many small farms into larger, more efficient, plots. Weather conditions have also been favorable recently.

commodities as recently as the early 1970s. From being a net importer of 6.8 million metric tons of wheat in 1970, it had become a net exporter of 12.7 million metric tons in 1985-1986, accounting for about 18 percent of world wheat exports.^{13/} The EC also now exports dairy products, poultry, eggs, beef, sugar, and wine.

As surpluses have accumulated, the governmental cost of maintaining the CAP has increased significantly, almost doubling from 1982 to 1986 (see Table 9). Export subsidy costs have soared in response to lower world prices in U.S. dollars coupled with the large appreciation of EC currencies. Internal pressure for policy reform has mounted. Change has been slow in coming, however, partly because it requires unanimous agreement by all 12 EC members, but several adjustments have been made. Recent reforms include the imposition of production quotas on milk, co-responsibility levies paid by dairy producers to finance surplus disposal, and more stringent grain intervention arrangements. For the 1986/87 crop, grain support price levels have been reduced or frozen, and grain farmers will pay co-responsibility levies for the first time. The accession of Spain and Portugal to the EC, limiting access to these markets, has led to new conflicts with some trading partners, especially the United States.

Japanese Farm Programs

Japanese farm policy is dictated by the desire to achieve high levels of self-sufficiency in staple food products such as rice, while also sustaining a large number of small farms as a social policy, even though domestic farm production costs far exceed those of foreign suppliers.^{14/} Seventy percent of all agricultural production is covered by support prices, which are often significantly higher than world prices--in the case of rice, from two to three times higher. Various other income support policies, including deficiency payments, are also employed.

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13. Self-sufficiency ratios, defined as the ratio of domestic production to consumption, and European Community wheat export levels are from U.S. Department of Agriculture, *World Agricultural Supply and Demand Estimates*, June 9, 1987, and unpublished USDA sources.
 14. Another goal of overall food policy in Japan is to discourage the consumption of meat for dietary and health reasons. For a good overview of agricultural policies in Japan, the United States, the European Community, and Canada, see D. Gale Johnson, Kenzo Hemmi, and Pierre Lardinois, *Agricultural Policy and Trade: Adjusting Domestic Programs in an International Framework*, A Task Force Report to the Trilateral Commission (1985).



High support prices are implemented in several ways. For rice, the government uses intervention purchases that withdraw excess supply from the market. As long as domestic output exceeds demand, imports of rice are kept at minimal levels, but export subsidies are not used. For most products, however, Japanese demand is much greater than domestic supply, even at high support price levels; in these cases, import restrictions are used to limit supply and elevate prices. Only state trading companies can import rice, wheat, barley, milk, butter, and tobacco; the state companies adjust their import levels to achieve the domestic price-support goals. Imports of beef, oranges, cheese, peanuts, and orange juice are limited by quotas, while a variable levy is used for sugar and a tariff quota for corn. In addition to these measures, Japan imposes tariffs on agricultural products averaging about 18 percent--more than six times the average tariff on industrial imports, and much higher than those of any other developed country. Tariffs are particularly high for oranges, meats, tobacco, and processed foods.

Most of the cost of the Japanese farm support system is passed directly to consumers through higher prices. Some of the remainder is financed out of profits made by the state trading companies when they buy imports at low world prices and release them on the domestic market at the higher support prices. For these reasons, Japanese government farm expenditures have not increased during the 1980s. Pressure to reform Japanese farm policies comes primarily from foreign suppliers, although Japanese consumers are increasingly expressing dissatisfaction with the high prices they must pay for food. ^{15/}

Despite these high protective walls, Japan is still the world's largest importer of agricultural products. If the barriers were eliminated, the prices of rice, wheat, and barley would fall by an estimated 75 percent; imports of agricultural products, especially rice and beef, would increase significantly. ^{16/}

The Cairns Group

Thirteen other key exporters have joined together to form the Cairns Group to represent their interests in the policy debate. ^{17/} For each of these countries, agricultural exports are a large proportion of total exports, mak-

15. Japanese farm policy, by keeping large amounts of land in farm use, is also a major contributor to the very high price of housing.

16. Johnson, Hemmi, and Lardinois, *Agricultural Policy and Trade*.

17. The Cairns Group includes Argentina, Australia, Brazil, Canada, Chile, Colombia, Hungary, Indonesia, Malaysia, Philippines, New Zealand, Thailand, and Uruguay.

ing them quite vulnerable to slumps in world agricultural markets. Moreover, their supply of most agricultural export products far exceeds domestic demand, so that changes in domestic output are virtually identical to changes in the amount available for export--making farm incomes heavily dependent on export sales. Australia, Canada, and Argentina are major exporters of wheat and meat products; New Zealand, of meat and dairy products; Thailand, of rice and corn; Brazil and Argentina, of soybean products; and Brazil, Colombia, Indonesia, Malaysia, the Philippines, and Thailand, of a wide range of tropical products, most importantly coffee, sugar, rubber, palm oil, and coconut products. (Australia is also the world's third largest exporter of sugar.)

Farm programs differ among all these countries, but policies affecting key export products tend to reflect international market forces. Most export products sell at about the same price in home markets as they do for export.^{18/} Since most of these countries do not intervene to support domestic prices, almost all surplus output is exported at world prices and little is stockpiled.^{19/} Even though changes in world prices are passed through quickly to domestic producers, it can take several seasons of low prices to persuade farmers to reduce their output. Many of these countries use state marketing monopolies to implement their agricultural policies and to market exports. Canada subsidizes transportation costs from farm to port. Every country in the group protects some high-cost commodities from foreign competition.

Comparing Key National Farm Programs: The Issue of Transparency

If the parties to the Uruguay Round agree to liberalize their agricultural policies, they must determine how to compare the effects of their diverse farm programs on production, consumption, and foreign trade.^{20/} To do

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18. For a number of developing countries in this group, exports are taxed to raise revenues. This causes domestic prices to be less than export prices.
 19. In some cases, especially for the developed countries, a substantial decline in world market prices will trigger income and price supports, as has occurred recently.
 20. Farm programs provide price incentives in three ways: by changing the prices that farmers receive for their products (through producer subsidies or taxes); by changing the prices that domestic consumers pay (through consumer subsidies or taxes); and by changing the prices at which exports can be offered on world markets (through export subsidies or taxes). The policy instruments employed are various, ranging from government purchases of commodities and the establishment of import quotas (both of which subsidize producers and tax consumers) to direct government payments to producers (which do not affect consumers).



this, they must measure the impact of nontariff barriers in a consistent manner across commodities and countries--often referred to as the issue of transparency. Although there is no single way of measuring the overall economic impacts of all farm programs, a set of metrics has been developed and estimated by the Organization for Economic Cooperation and Development and the U.S. Department of Agriculture. ^{21/}

Producer Subsidy Equivalents. A producer subsidy equivalent (PSE) has been developed to measure the total income transfer to farmers provided by government programs. It provides an estimate of the revenue that would be needed to compensate producers if existing government programs were eliminated. PSEs are calculated by combining all direct government payments to farmers with estimates of the subsidy paid by consumers to producers resulting from policies that raise consumer prices, such as import quotas, variable levies, and government price supports. (Some direct input subsidies are also included.) A PSE can be measured in percentage form by dividing the revenue estimate by the cash receipts, including direct government payments, of the relevant producers. Similar measures can be made for consumer subsidies and taxes, and for producer taxes.

Although PSEs provide an invaluable tool for comparing the effects of government programs across commodities and countries, certain technical problems may limit their effectiveness as a negotiating standard. ^{22/} Most importantly, PSEs measure the transfer of income to farmers by farm programs, not necessarily the amount of trade distortion. They do not differentiate between farm programs that directly affect trade flows, such as export subsidies, and programs such as research and development and market extension that have a much less direct and immediate impact on trade flows. This becomes particularly important in any effort to devise production-neutral income transfers to replace outright production subsidies, since

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21. For a detailed description of the methodology used to calculate producer subsidy equivalents, see Organization for Economic Cooperation and Development, *Ministerial Mandate on Agricultural Trade Draft Report to the Council* (with annexes) (May 1987), and U.S. Department of Agriculture, *Government Intervention in Agriculture: Measurement, Evaluation and Implications for Trade Negotiations*, FAER-29 (April 1987). All PSE results presented in this paper come from the USDA report.
 22. See Nancy Schwartz, "Is There a Role for Producer and Consumer Subsidy Equivalents in Trade Negotiations?", paper presented at the International Agricultural Trade Research Consortium in El Batán, Mexico, December 13-18, 1986.

these would be treated equally by the PSE measure described above. Over time, the methodology of these calculations can be improved, especially in terms of their usefulness to the GATT negotiators. ^{23/}

Comparing Producer Subsidy Equivalents Among Commodities and Countries. Producer subsidy equivalents for many agricultural products and countries have been calculated by the OECD for the years 1979 to 1981. The U.S. Department of Agriculture has updated many of these estimates to cover policies in effect between 1982 and 1984. Unfortunately, many farm policies have changed since this period, as have many exchange rates. Most importantly, under the current regime, PSEs would be considerably higher in most countries because world prices have declined while many farm supports have not. The large appreciation of European Community and Japanese currencies relative to the U.S. dollar would increase PSEs for these countries substantially relative to the United States, Canada, and Australia. Subject to these qualifications, the PSEs calculated by the USDA offer the best available overview of the impact of key national farm programs.

Tables 10 and 11 confirm that developed countries actively subsidize their farmers, but often at different levels for different commodities. In Table 11, Japan stands out as by far the largest subsidizer of its farmers, with a weighted average PSE of 72 percent. The European Community's average subsidy is considerably less at 33 percent, but significantly higher than the 22 percent rates for the United States and Canada. Australia's farm policies provide relatively little support for farmers, estimated at 9 percent. ^{24/} Table 11 also summarizes the main policy instruments employed by various countries to support key agricultural products.

BARGAINING POSITIONS IN THE URUGUAY ROUND

In the Uruguay Round negotiations on agricultural reform currently under way, the chances for major agricultural trade liberalization appear much

23. Other measures of producer subsidy have been recommended that take account of many of these problems. See Gordon Rausser and Brian Wright, *Alternative Strategies for Trade Policy Reform*, Department of Agricultural and Resource Economics, University of California, Berkeley, April 1987.

24. Weighted-average PSEs for several other countries are: 18 percent for Taiwan, 64 percent for South Korea, 8 percent for India, -22 percent for Argentina, -9 percent for Nigeria, 40 percent for Mexico, and 7 percent for Brazil.



TABLE 10. RANKING OF PRODUCER SUBSIDY EQUIVALENTS BY COMMODITY AND COUNTRY, 1982-1984 ^{a/}

Producer Subsidy Equivalent ^{b/}	United States	Australia	Canada	European Community	Japan	Taiwan ^{c/}	South Korea ^{c/}	Mexico	Brazil
0 to 9	Beef Pork Poultry Soybeans	Beef Cotton Pork Poultry Sheep Wheat Wool	Beef Corn Pork Soybeans	Corn		Pork			Poultry
10 to 24		Cane sugar Rice	Poultry Rapeseed Wheat	Common wheat Pork		Corn Soybeans Sugar	Poultry	Cotton	
25 to 49	Corn Cotton Dairy Rice Wheat	Milk	Sugar	Dairy Wheat Poultry Rapeseed Rice Sheep Soybeans Sugar	Poultry	Beef Dairy Poultry Rice Tobacco	Pork	Soybeans Wheat	Cotton Rice
50 to 74	Sugar		Dairy	Beef	Beef Pork Soybeans Sugar	Wheat	Beef Corn Milk Rice Soybeans Wheat	Corn	Wheat
75 to 99					Milk Rice Wheat				

SOURCE: U.S. Department of Agriculture, *Government Intervention in Agriculture: Measurement, Evolution and Implications for Trade Negotiations*, FAER-29 (April 1987).

NOTE: Commodities in boldface are primarily exported. Other commodities tend to be imported.

a. Some products lack data for some years. References to poultry and sheep are to meat, not live animals.

b. Ratio of value of policy transfers to gross domestic value of production including direct payments, in percent, based on data for 1982 through 1984..

c. Impacts of input subsidies not included.

TABLE 11. WEIGHTED AVERAGES OF PRODUCER SUBSIDY EQUIVALENTS BY COUNTRY, WITH MAJOR SOURCES OF ASSISTANCE, 1982-1984

Country	Weighted Average PSE (In percent) ^{a/}	Major Sources of Assistance to Producers			
		Grains and Oilseeds	Dairy Products	Livestock	Sugar
Japan	72 ^{b/}	Grains: State trading Oilseeds: Deficiency payments	Price support through government stock- holding and border restriction. Also some deficiency payments	Beef: Quotas, tariff, domestic price stabi- lization scheme Pork: Variable levy Poultry: Tariff	Tariffs, surcharges, and rebates
European Community	33	Grains: Variable import levies Oilseeds: Defi- ciency payments	Variable import levies, export subsidies, and government purchases	Variable import levies and export subsidies	Variable import levies and export subsidies
Canada	22	Wheat and barley: Transport subsidies and income stabili- zation payments Corn: Tariff Oilseeds: Transport subsidies and income stabilization payments	Domestic price support (maintained with import quotas and direct payments)	Beef and pork: Tariffs, inspec- tion services Poultry: Quota, price sup- port, and tariff	Tariff, stabiliza- tion payments
United States	22	Grains: Deficiency payments PIK entitlements, CCC inventory operations, and commodity loans Oilseeds: CCC inventory operations and commodity loans	Price supports main- tained by tariffs, quotas, and govern- ment purchases	Beef: Tariff Other: General (R&D, inspection, etc.)	Price supports and quotas
Australia	9	Domestic consumption pricing	Domestic consumption pricing	Input subsidies and inspection services	Domestic consumption pricing

SOURCE: U.S. Department of Agriculture, *Government Intervention in Agriculture: Measurement, Evolution and Implications for Trade Negotiations*, FAER-29 (April 1987).

a. Weighted average producer subsidy equivalent (PSE) includes several commodities not listed under country headings in Table 4.

b. Excludes citrus.

better than in the past. The interests of many of the key parties have now converged. In both the United States and the European Community, commodity stockpiles and government expenditures have spiraled. All major agricultural exporting countries have suffered from low world prices. And even some net importing countries that gain from low prices find that their domestic producers have been placed at a disadvantage.

These common interests also reflect tensions, as exporting countries vie for shares in stagnant world markets. There is widespread concern that an agricultural trade war has already begun, as seen in the expansion of U.S. export promotion programs and other U.S. policy changes that have driven down world prices while maintaining domestic income support levels; in the Canadian imposition of countervailing duties on U.S. corn exports; and in governmental pronouncements expressing concern about foreign trade restrictions, especially in Japan.

To help defuse tensions, a standstill agreement has been proposed for the first stage of the talks. It would require countries not to expand existing agricultural programs or initiate new ones during the negotiations. The standstill approach is not supported by all U.S. policymakers, some of whom feel that U.S. actions such as expanding export subsidies, while inconsistent with the government's longer-term goals, are needed to spur other countries to negotiate major reductions in agricultural supports. The United States has suggested that the talks be accelerated in an attempt to reap an "early harvest" agreement in two years rather than four, but the European Community has not endorsed the idea.

Each of the participants has much to gain, but also something to lose, by policy reform. Balancing these internal considerations may prove as difficult for many countries as coaxing concessions from foreign bargainers. A final agreement for multilateral reforms will likely aim at some broad commitment by all countries to liberalization, leaving each government considerable discretion as to which programs to change and how fast, and with a phase-in period over a number of years. A parallel task will be to reformulate GATT rules for agricultural trade to accompany any new agricultural agreement.

The United States

Reiterating the high priority that it has set for agricultural policy reform in this round, the United States has offered to table all of its farm programs for negotiation in return for equal consideration by others. The U.S. posi-